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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,034	02/03/2006	Naoki Hashiguchi	285645US3PCT	2418

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C. IRVIN MCCLELLAND
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
KRUER, STEFAN	

ART UNIT	PAPER NUMBER
3654	

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/567,034	HASHIGUCHI, NAOKI	
	Examiner	Art Unit	
	Stefan Kruer	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1 - 13 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1 - 13 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 03 February 2006 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 1 May 2006.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 6 and 8 – 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riko et al (JP 10-139327) in view of Toshiba Corp. (JP 64-69489), henceforth to be referred to as Toshiba.

Re: Claims 1 - 4, Riko et al disclose:

- A car (1, Fig.'s 1 and 2) raised and lowered within a hoistway (2),
- The car having a cage,
- The cage having a chamfered portion (vicinity of 41) provided at a corner portion of the cage,
- Said chamfered portion comprising first and second chamfered portions located at diagonal positions located at diagonal positions of the cage,
- A first and a second car guide rail (3),
- Said first and second guide rails being disposed within the hoistway in opposition to said first and second chamfered portions, respectively;

however, Riko et al are silent regarding a car frame, a vertical column disposed along each said first and second chamfered portions and a guide shoe attached to each of said vertical columns.

Attention is directed to Toshiba who teaches his first and second columns (25, Fig. 25, Fig. 2) disposed along his chamfered portions, his columns included within his car frame of an alternate embodiment (as 15b, Fig. 4) and guide shoes (29, Fig.'s 1 and 3) that engage his first and second guide rails and that are attached to his vertical columns.

It would have been obvious to one of ordinary skill in the art to modify the reference of Riko et al with the teachings of Toshiba to provide a frame for an elevator car and vertical columns disposed along the chamfered portions for purpose of adequate structural support for hoisted objects, as well as guide shoes for engagement with guide rails.

Re: Claim 5, though Toshiba teaches his first and second vertical columns having a groove portion, he teaches his guide shoes disposed above and below the vertical columns.

Nevertheless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the guide shoes disposed within the groove portions, since it has been held that a merely reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein, 8 USPQ 167.*

Re: Claim 6, Toshiba teaches his first and second vertical columns having groove portions that extend continuously in a vertical direction and that his guide rails are at least partially disposed within said groove portions.

Re: Claims 8 and 9, Riko et al is silent regarding vertical columns and Toshiba teaches his vertical columns, however his upper and lower beams (15c and 15 a, respectively) are disposed between his vertical columns in a non-diagonal line of the car as seen in a vertical projection plane.

In that the upper comprises a portion of the car frame and Riko et al is silent regarding his car frame, it would have been obvious to one having ordinary skill in the art to dispose the upper and lower beams of Toshiba in a diagonal line of the car as seen in a vertical projection plane to complete the car frame including the vertical columns disposed along the chamfered portions of the reference of Riko et al as taught by Toshiba.

Claim 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riko et al in view of Toshiba, as applied to Claim 3, and in further view of Hymans (US 2,270,441).

Riko et al and Toshiba are silent regarding a safety device.

Attention is directed to Hymans who teaches his safety device (17) disposed at least partially within his groove portion of his vertical column (18) as seen in a vertical projection plane.

It would have been obvious to one of ordinary skill in the art to modify the reference of Riko et al and Toshiba with the teaching of Hymans to provide a safety device for emergencies.

Claims 10 - 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riko et al in view of Toshiba, as applied to Claim 1, and in further view of Niigata Engineering Co. Ltd. (JP 50-124063), henceforth referred to as Niigata, and Chabrier (US 5,377,787).

Riko et al disclose first, second, third and fourth chamfered portions (vicinity of each 41 and 45), whereby said chamfered portions are located at positions at first and second diagonals of their cage, and first and second guide rails (3) disposed within their hoistway and in opposition to his first and second chamfered portions; however, Riko et al are on silent regarding vertical columns and their and fourth guide rails.

Toshiba teaches his first and second vertical columns (15b, Fig. 4) disposed along his chamfered portion (25, Fig. 2) and his first upper and first lower beams (15c and 15 a, Fig. 4, respectively) disposed between said vertical columns; however, his vertical columns and chamfered portions are located at positions on a non-diagonal of the cage.

Attention is directed to Niigata who teaches his cage (5) having first, second, third and fourth chamfered portions (in vicinity of each 4) located at positions in pairs at their respective diagonal of the cage, as well as first, second, third and fourth guide rails (4) disposed within his hoistway (3) and in opposition to a respective chamfered portion; however, Niigata is silent regarding a car frame.

Further consideration is given to Chabrier who teaches:

- his cage (3),
- his first, second and third vertical guide rails (7, 14, and 21, respectively),
- non-chamfered portions (4) located at positions on one and other diagonals of his cage,
- his first upper beam disposed between the first guide rail and the second guide rail,
- and his second upper beam disposed between the third guide rail and translation structure (5), the latter for enabling access to a space beneath his cage while securely arranging his apparatus.

It would have been obvious to one of ordinary skill in the art to modify the reference of Riko et al and Toshiba with the teachings of Niigata and Chabrier to provide all four chamfered portions with vertical columns and guide rails in opposition to their respective vertical column, as well as first and second upper and lower beams securing their respective vertical columns along a diagonal of the cage, to provide a balanced, secured elevating structure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Toshiba.

Toshiba discloses:

- a car (21) raised and lowered within a hoistway (2),
- the car having a car frame (15c, 15a and 15b) including a vertical column (15b),
- a cage (22) supported on the car frame,
- wherein said care has a recess (bordered by 25, Fig. 2) provided in a side face thereof,
- and the vertical column (25) is at least partially disposed within the recess.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gate (6,131,73) Lundberg et al (1,978,273) and Tracy (434,849) are cited for reference of an elevator apparatus having three (3) guide rails and three (3) opposing chamfered portions along the corners of his cage and an elevator apparatus having a car frame including upper beams disposed on a diagonal of the cage and connecting the upper portions of vertical guide columns disposed along the corners of his cage.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on 571.272.6951. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

SHK
29 September 2006

Kathy Matecki

KATHY MATECKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600